

## Remarks and Arguments

### I. Summary of the Office Action

Claims 23-29 were examined in the application.

The examiner objected to informalities in claims 23 and 24.

Claims 23, 26, and 28-29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Legrand, "Real-time minimization of the total tracking error in phase and delay lock loops: a second approach of the fast adaptive bandwidth algorithm" combined with Parkinson, ed., Global Positioning System: Theory and Applications, vol. 1.

Claims 23, 26, and 28-29 were further rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Legrand with Parkinson, together with either Loh, U.S. Patent No. 6,587,075, or Braff, "Derivation of ranging source integrity requirements for the Local Area Augmentation System (LAAS)."

The examiner indicated that claims 24-25 and 27 would be allowable if rewritten to overcome the objected-to informalities and to include all of the limitations of the base claim and any intervening claims.

### II. Response to the Office Action

#### A. Claim Objections

In claim 23, the examiner objected to a lack of clarity with respect to the term "the error," and in claim 24, the examiner noted that a transitional term such as "comprising" appeared to be missing. These claims have been amended to obviate the objections.

#### B. Allowable Subject Matter

The applicant appreciates the examiner's indication that claims 24-25 and 27 recite allowable

subject matter. Claim 24 has been rewritten in independent form to incorporate all of the subject matter of base claim 23, and is believed to be in a condition for allowance. Claim 25 depends from amended claim 24 and is likewise believed to be in a condition for allowance.

New independent claim 30 has been added to the application. Independent claim 30 has been written to include all of the limitations of the base claim 23, intervening claim 26, and of claim 27. Accordingly, new independent claim 30 corresponds to claim 27 rewritten in independent form, and it recites only subject matter that the examiner has indicated would be allowable. As a result, claim 30 is believed to be in a condition for allowance.

### *C. Substantive Rejections*

The applicant appreciates the examiner's effort to further explain the basis for rejection of claims 23, 26, and 28-29 in light of Legrand and Parkinson. The rejection requires that the claimed "lower confidence limit" be read to encompass the "threshold" disclosed by Parkinson. The examiner explains that, in the Parkinson reference, "one would expect a threshold to be set at the lowest signal-to-noise value that the user has confidence in. Thus, the threshold would be a lower confidence limit." Office Action, page 2. The applicant does not agree with the examiner's reading of the claim language; however, it appears that the disagreement is more semantic than substantive, and the applicant's amendment to independent claims 23 and 29 is believed to clarify this issue.

As the examiner noted, the importance of the lower confidence limit to airline safety was explained in detail in the previous response. In brief, the inventor recognized that it is important for a navigation system not only to handle situations where a signal-to-noise ratio is dangerously low, but also to handle situations where measurement of the signal-to-noise measurement may itself be incorrect. Thus, instead of using the calculated signal-to-noise ratio alone in measuring the total error, the claimed invention uses a "lower confidence limit." The amendment to claims 23 and 29 clarifies that this "lower confidence limit" is "calculated at least in part from the calculated signal-to-

JAN 12 2007

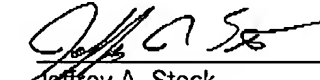
noise ratio." As a consequence, the lower confidence limit is a value that changes along with the signal-to-noise ratio, not a fixed threshold that sets "a desired minimum" of the signal-to-noise ratio, as recited in Parkinson, page 392. Accordingly, the applicant believes claims 23, 26, and 28-29 distinguish over Legrand and Parkinson and are in a condition for allowance.

### III. Conclusion

The applicant believes claims 23-30 are in a condition for allowance. If the examiner has any questions or identifies any issues that can be resolved over the telephone, the Examiner is invited to contact the Applicant's representative at the number given below.

Respectfully submitted,

Dated: January 12, 2007

  
\_\_\_\_\_  
Jeffrey A. Steck  
Reg. No. 40,184